regular than in 1906, but the preceding minimum is not well developed; 1909 is still more irregular because the central maximum is lower than another maximum occurring five days earlier, at a time when the well-developed curves show a minimum. Finally in 1904, which had the lowest sunspot number, the maximum definitely parts company with the day of reference, and occurs two days before. Thus for these six years it appears that the more abundant the sunspots the more pronounced is the terrestrial response, and the more promptly does the response follow the supposed cause.

(To be continued.)

## BREATHING WELL IN CALIFORNIA.

Mr. N. M. Cunningham, observer at Red Bluff, Cal., writes under date of April 18, 1918, that there is a known

"breathing well" on the ranch of D. Ewing, 6 miles northwest of Red Bluff, Cal. The well is 60 feet deep, about 3 feet in diameter and tightly covered by a board platform tapped by a small iron pipe carrying a small whistle which always gives warning of approaching storms by its sounding. Mr. Cunningham has compared the "breathings" of the well with his station barograph record at Red Bluff and finds that the well "breathes in" when the barometer is rising, and "breathes out" when it is falling.

This further confirms the previous experiences with such wells; but an interesting and perhaps very valuable quantitative study of this well's behavior could be made by recording its changes in some detail and analyzing them with respect to atmospheric pressure changes in the manner followed by E. G. Bilham (see abstract and reference in this Review for January, 1918, p. 26).—

c. a., ir.